heatilator® ECOCHOICE™

WOOD STOVE

SERVICE MANUAL

⚠ WARNING

Fire Risk.

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged appliance.
- Modification of the appliance.
- Installation other than as instructed by Hearth & Home Technologies.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.
- Operating appliance without fully assembling all components.
- Operating appliance without legs attached (if supplied with unit).
- Do NOT Overfire

Or any such action that may cause a fire hazard.

NOTE: Hearth & Home Technologies, manufacturer of this appliance, reserves the right to alter its products, their specifications and/or price without notice.

⚠ CAUTION

Shock and Smoke Hazard

- Allow the appliance to completely cool before servicing or making repairs.
- Smoke spillage into room can occur if appliance venting is not properly installed.
- Risk of shock if appliance not unplugged before servicing appliance.

⚠ CAUTION

Shock hazard.

- Do NOT remove grounding prong from plug.
- Plug directly into properly grounded 3 prong receptacle.
- Unplug cord before doing any checks or repairs.
- Do NOT touch wires while unit is plugged in.

HEARTH & HOME technologies

July 28th, 2011

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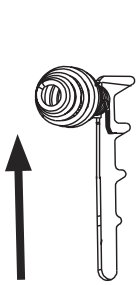
STARTING A FIRE

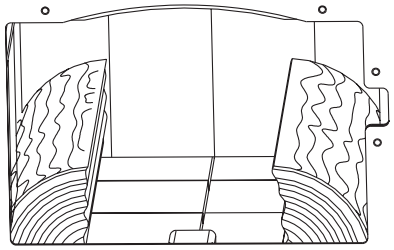
FIRST FIRE ITEMS NEEDED: 10 PIECES OF NEWSPAPER, 10-20 PIECES OF DRY KINDLING AND A FEW PIECES OF DRY SPLIT WOOD.

OPEN AIR CONTROL



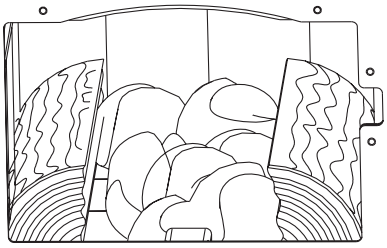
1

LOAD WOOD



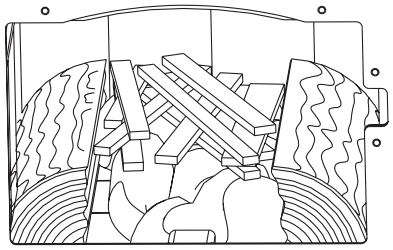
2

ADD NEWSPAPER



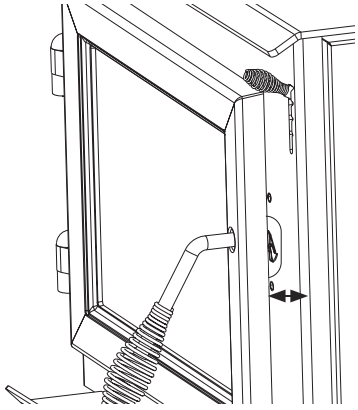
3

ADD KINDLING



LIGHT THE PAPER

4



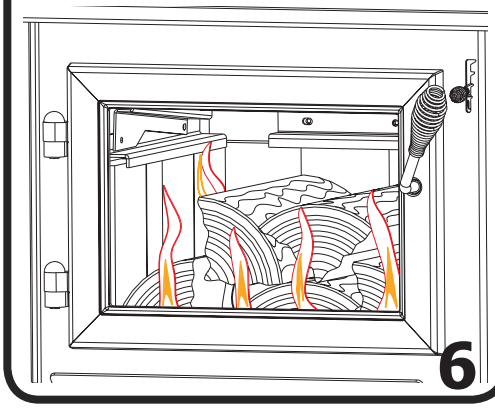
OPEN THE FIREBOX DOOR ABOUT A 1/2 INCH UNTIL THE DRAFT IS ESTABLISHED.

WARNING

(DO NOT LEAVE UNATTENDED)

5

ADD MORE WOOD



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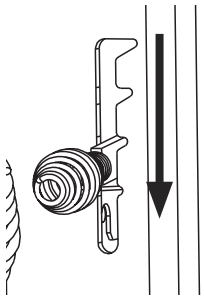
REDUCE AIR CONTROL

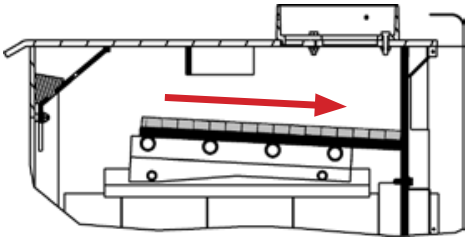


7

UNIT IS READY FOR NORMAL OPERATION.

BASIC UNIT INSPECTION

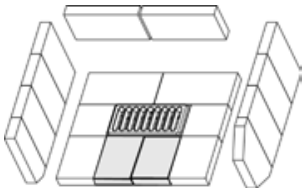
BAFFLE PLACEMENT



Baffle & blanket placement is critical to heat output, efficiency and overall life of the unit. Make sure the baffle is pushed all of the way to the back of the firebox and the blanket is laying flat.

INSPECT FIREBRICKS & ASH GRATE

(AFTER EACH CLEANING)

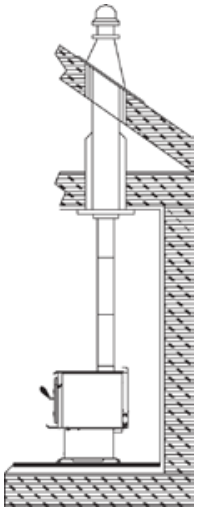


Firebrick is designed to protect your firebox. Replace firebricks that are crumbling, cracked, or broken. If you have an optional ash door, check to make sure the door is closing properly.

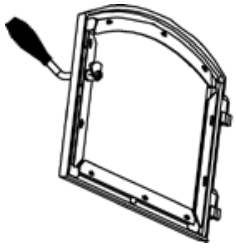
CHIMNEY & CAP INSPECTION

The chimney and chimney cap must be inspected for soot & creosote during the burn season. This will prevent pipe blockage, poor draft, and chimney fires.

Always burn dry wood to help prevent cap blockage & creosote build-up.

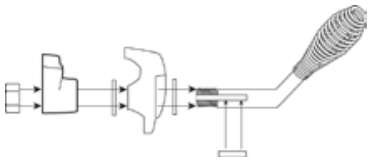


DOOR & LATCH CHECK



Keeping the door & glass gasket in good shape will maintain good burn times on a low burn setting.

Check the glass frame for loose screws to prevent air leakage.

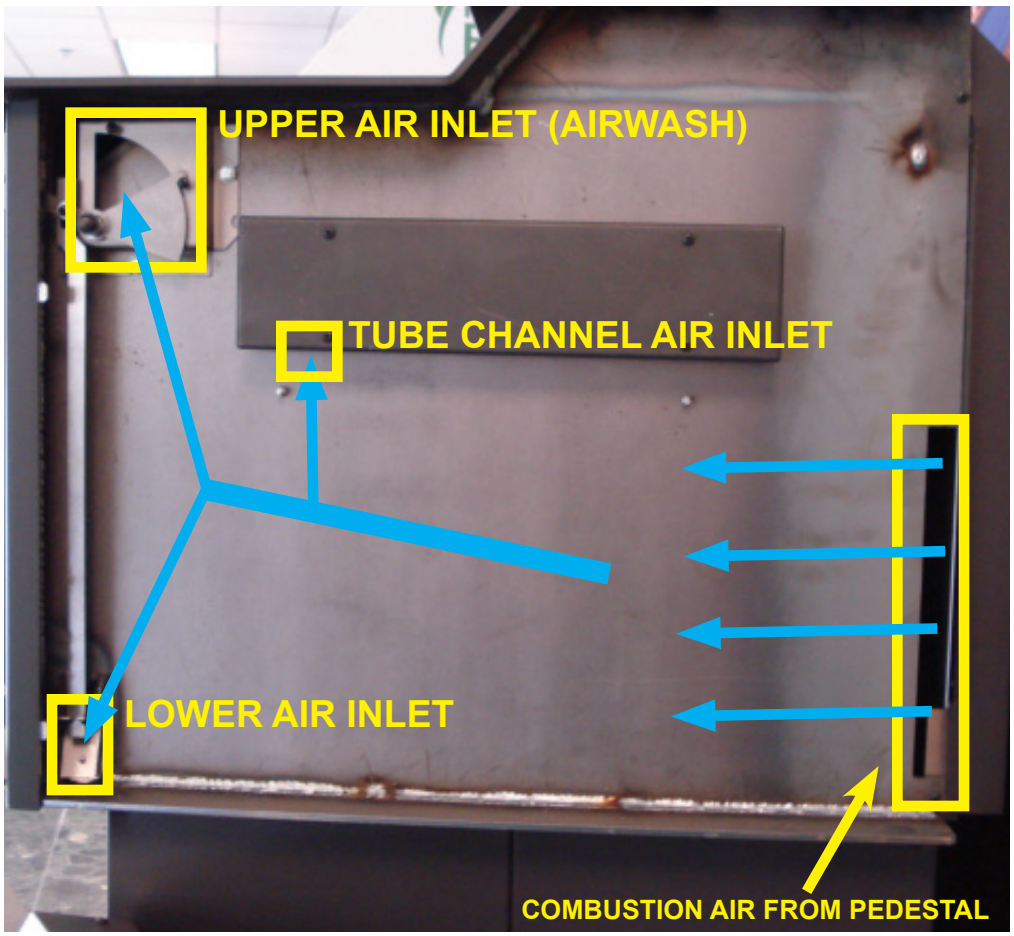


Check the door latch for proper adjustment. This is very important especially after the door rope has formed to the stove face.

Start the first inspection of your unit after the first 2 months of use or if performance changes and adjust your schedule accordingly. Maintenance is required for safe operation and must be performed to maintain your warranty.

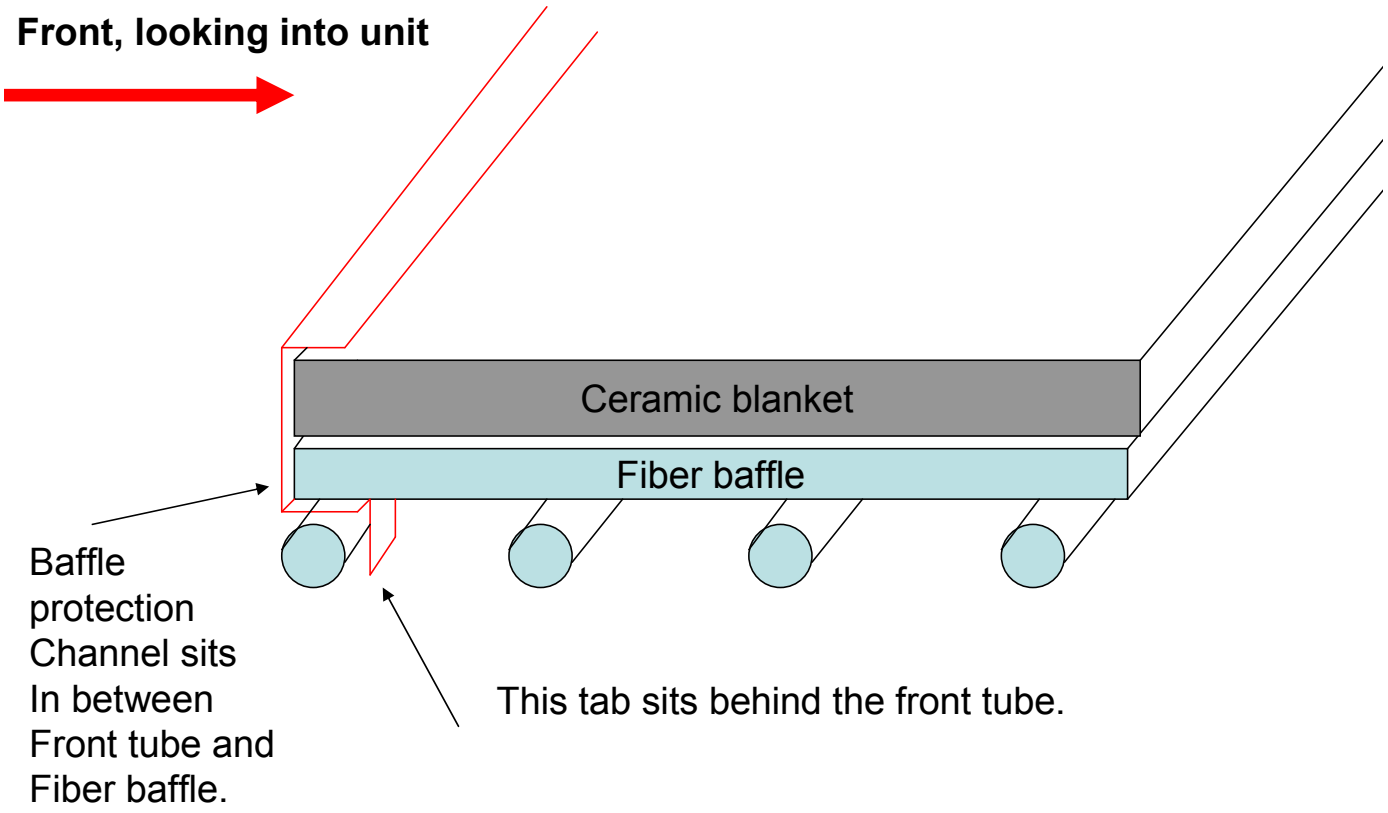
COMBUSTION AIR PATHWAYS

Combustion air flows through the back of the pedestal into the combustion air channel. This air then flows to the combustion air inlet areas on the side of the unit.

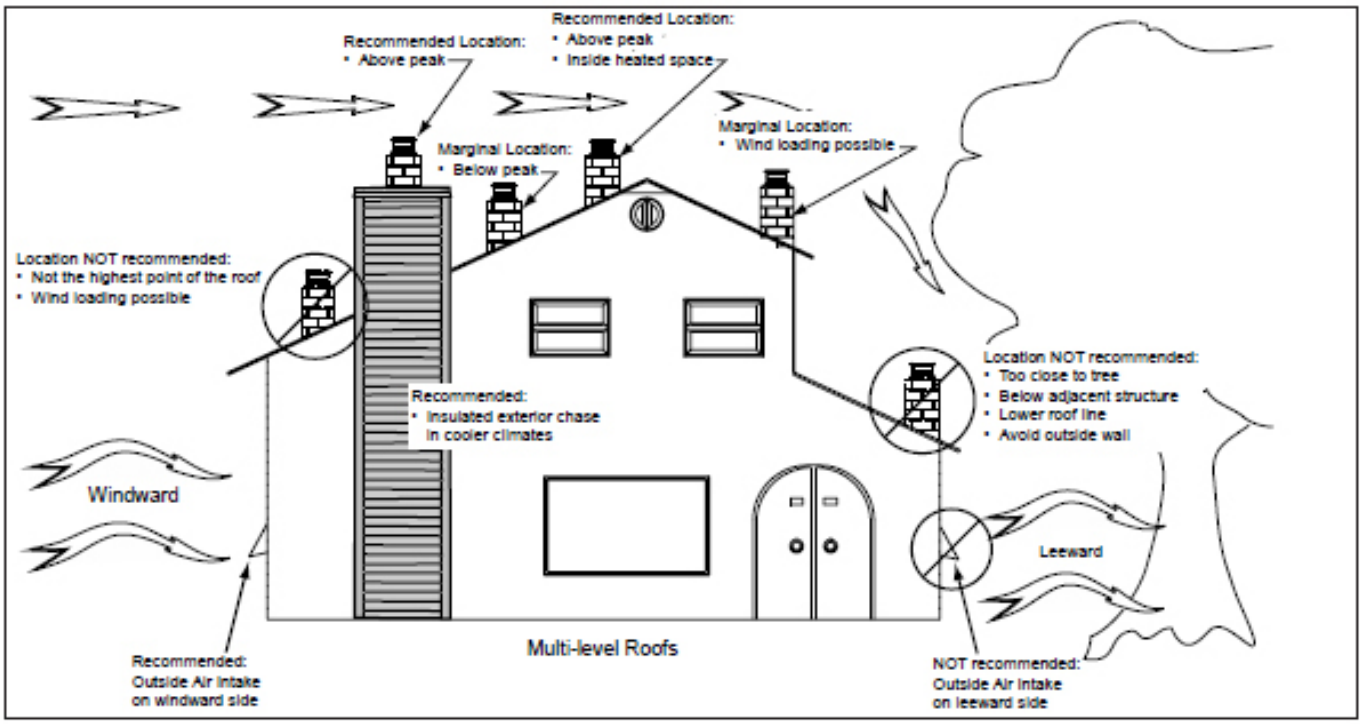


PROPER BAFFLE PLACEMENT

Side view


Front, looking into unit
Ceramic blanket
Fiber baffle
Baffle protection Channel sits In between Front tube and Fiber baffle.
This tab sits behind the front tube.

SUGGESTED CHIMNEY LOCATIONS FOR OPTIMUM PERFORMANCE.



CHIMNEY DRAFT BASICS

Has the chimney has ever worked properly? This will help in determining if the problem is with the location of the chimney when it was installed or if it is a problem with the chimney being restricted.

Items to look at:

***Is the chimney cap clean?

***Is the chimney free of creosote?

***Is the homeowner burning dry wood?

***Is the stove baffle in the correct position?

***Check for fans running in the house that will effect draft.

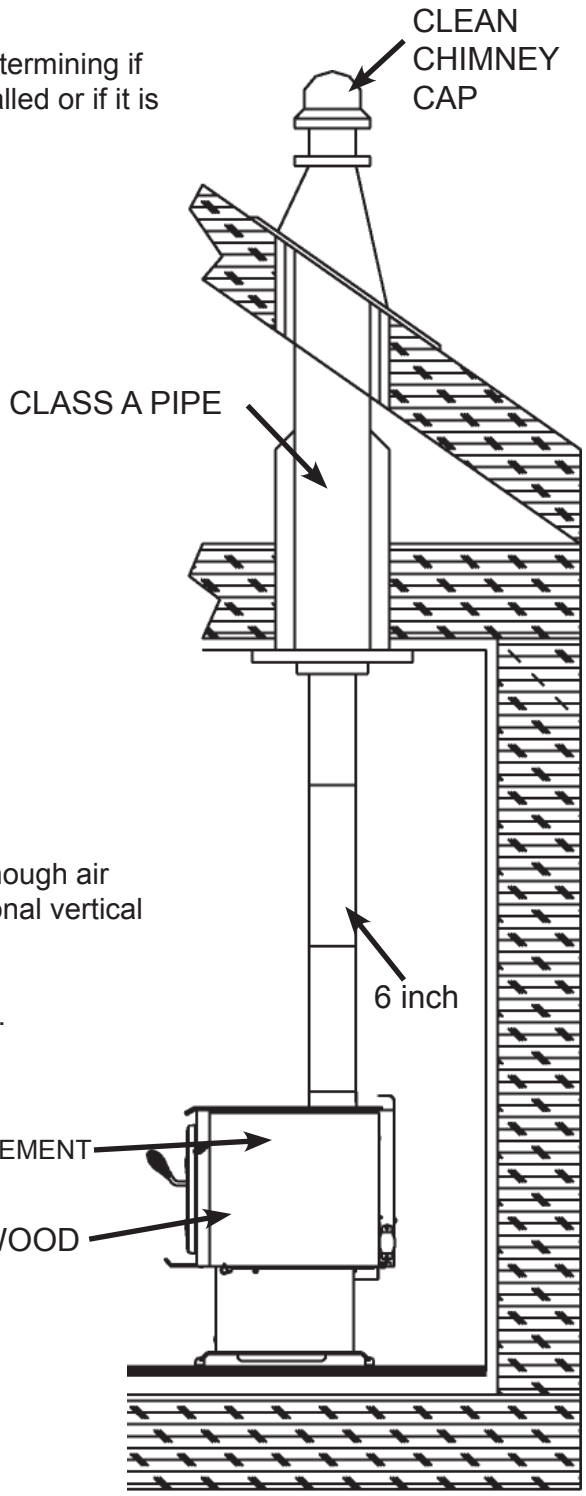
***Can hot air escape above the chimney termination?
(This will reduce draft)

***Is the entire chimney system 6 inch in diameter?

***Is the chimney protected from getting too cold?

If the draft in the chimney is working, but it is not quite pulling enough air through it, add a section of chimney to the system. Each additional vertical section of chimney will increase draft.

Chimneys need to stay warm at all times or the draft can be lost.



HOW TO MANAGE COAL BEDS

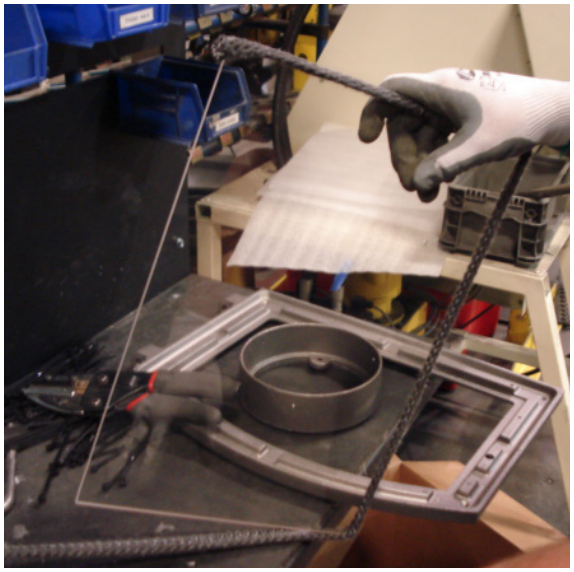
1) Rake the coals from the back of the firebox forward.
2) Put one medium size split piece of wood directly on top of the coals.
3) Shut the door and turn the burn rate control to high. Allow the wood to burn the coals down.
4) Repeat the previous steps until the coals have burned down.
5) Spread remaining coals evenly across the firebox floor and load at least three separate split pieces of wood.
6) Set burn rate control to desired level.

FIREBOX WITH A LARGE COAL BED. →

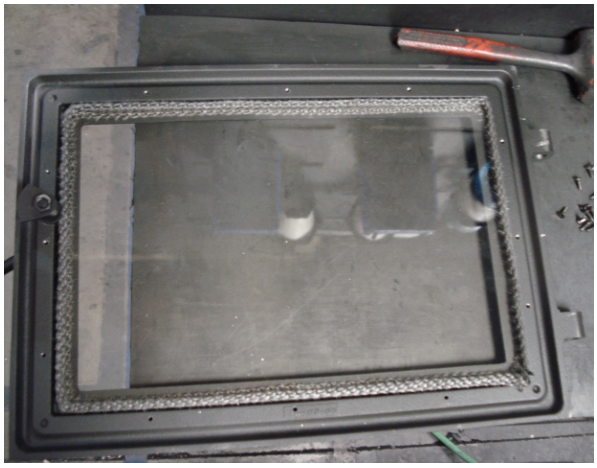
EXAMPLE OF RAKING THE COALS FORWARD. →

HOW TO INSTALL NEW GLASS GASKET

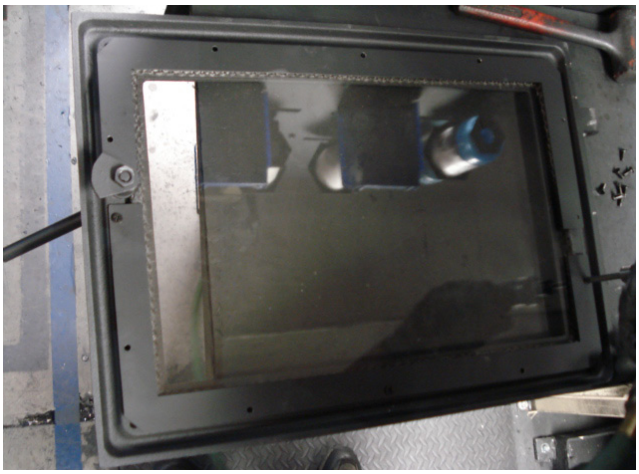
1) REMOVE GLASS RETAINER FROM THE DOOR.
2) CAREFULLY REMOVE THE GLASS.
3) REMOVE OLD GASKET AND CLEAN THE GLASS.
4) INSTALL NEW GLASS GASKET STARTING AT THE BOTTOM CORNER. MAKE SURE THE GASKET IS EVEN ON BOTH SIDES OF THE GLASS.



5) CAREFULLY PLACE THE GLASS BACK INTO THE DOOR FRAME. KEEP THE CUT EDGE OF THE GASKET TOWARDS THE BOTTOM HINGE SIDE OF THE DOOR.



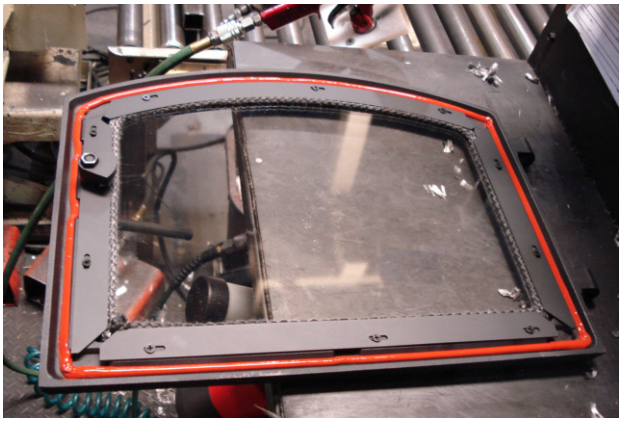
6) REINSTALL THE GLASS RETAINER AND SCREWS. DO NOT OVER TIGHTEN THE SCREWS.



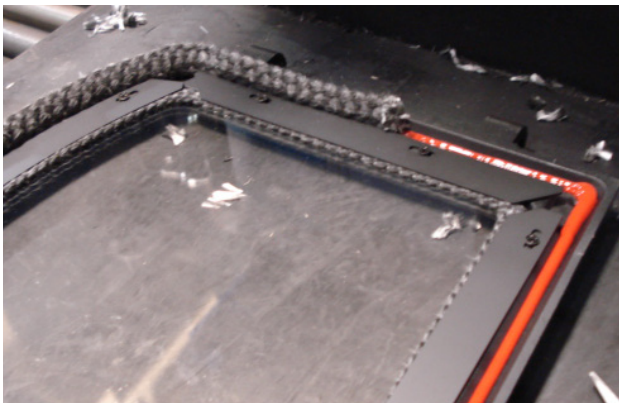
HOW TO INSTALL NEW DOOR ROPE GASKET

1) REMOVE OLD DOOR GASKET AND CLEAN THE GASKET GROOVE AREA. REMOVE AS MUCH OF THE OLD SILICONE AS POSSIBLE.

2) PUT A BEAD OF NEW HIGH TEMP RED SILICONE INTO THE GASKET GROOVE.



3) PREP THE DOOR ROPE CUT END BY TUCKING THE LOOSE ENDS BACK INTO ITSELF.
4) START INSTALLING THE ROPE ONTO THE DOOR STARTING AT THE HINGE SIDE.

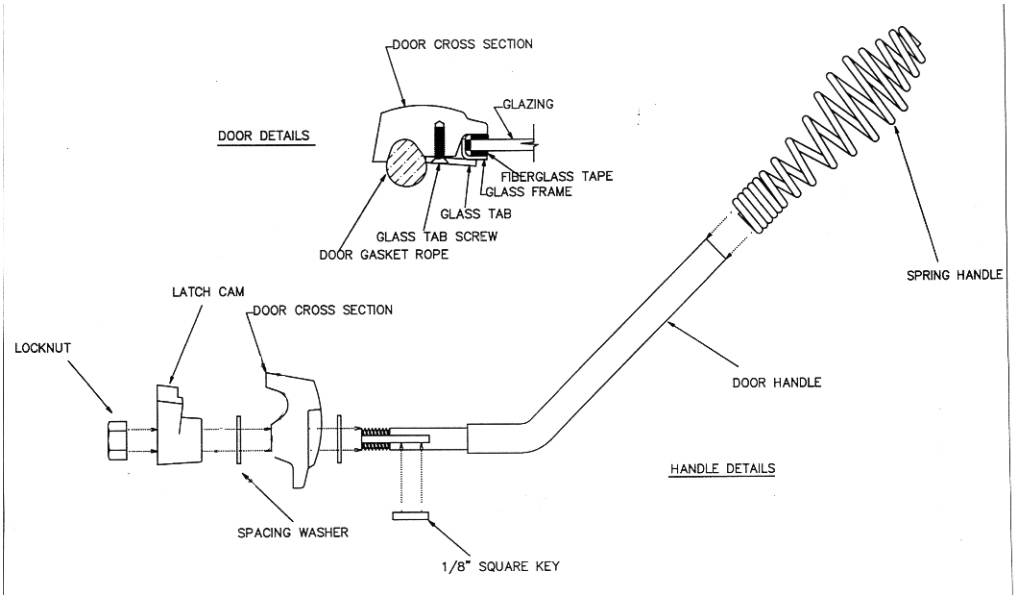


5) AFTER THE DOOR ROPE HAS BEEN SUCCESSFULLY REPLACED, REINSTALL DOOR ON THE UNIT AND ALLOW TO DRY FOR 12 HOURS BEFORE BURNING THE STOVE.

HOW TO ADJUST THE DOOR HANDLE

Door adjustment may be necessary after the unit has been burned or if the door rope seal has been replaced.

To adjust the door either tighter or looser, follow the instructions below:



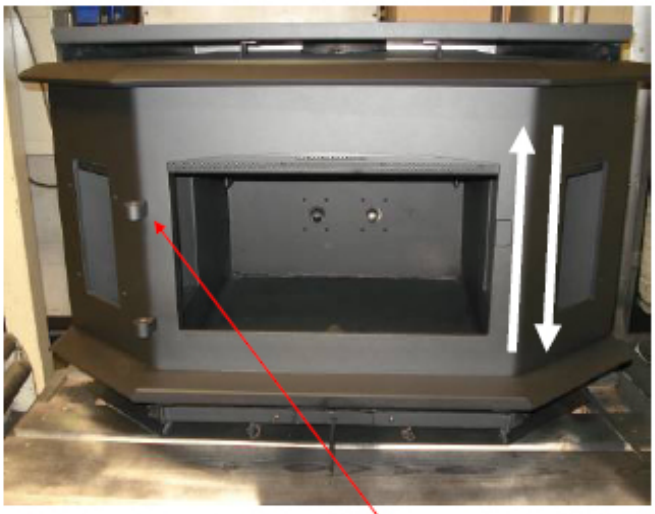
1) Remove the locknut, latch cam, and square key. Note: If the unit has been used for a while, soak the nut in oil to assist with removal.

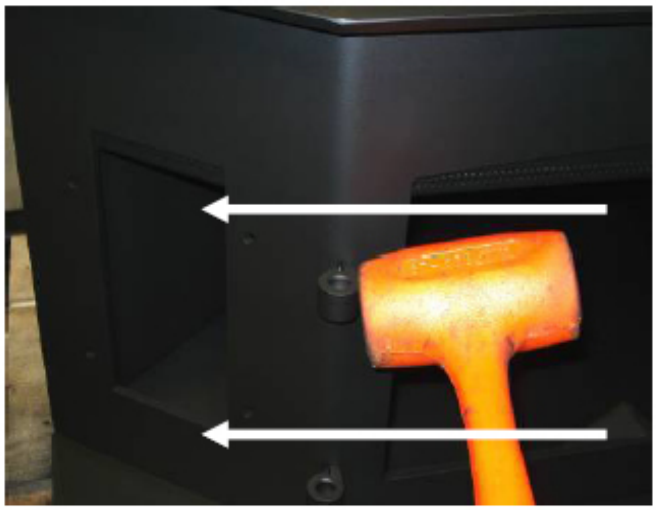
2) If the door is too tight, add a spacing washer between the door frame and latch cam. If more than two spacing washers are needed, verify that the proper door rope is installed and replace if needed.

3) If the door is too loose, remove a spacing washer from between the door frame and latch cam. If no spacing washers are present, the door will need to be re-roped.

HOW TO ADJUST THE DOOR HINGE

EXAMPLE OF A UNIT WITH WELDED HINGES





During manufacturing the door hinge boss welded to the firebox can occasionally get knocked out of alignment. Units
shipped with the door already installed from the factory are adjusted prior to being boxed.
Units shipped without doors are not adjusted at the factory so field technicians may need to make minor adjustments.
Instructions to adjust the door hinge boss:
STEP ONE- install door on unit, observe door alignment with latch box.(**making sure that the cam latch is in the correct position**).
If the door cam and latch box do not line up properly proceed to the next step.
STEP TWO- (Remove the door prior to adjustment) using a rubber mallet carefully tap the top hinge boss LEFT TO RAISE THE
LATCH or bottom hinge boss left to LOWER THE LATCH. **CHECK DOOR ALIGNEMENT OFTEN, SMALL ADJUSTMENTS WILL BE**
EXAGERATED ON THE LATCH SIDE OF THE DOOR!!!

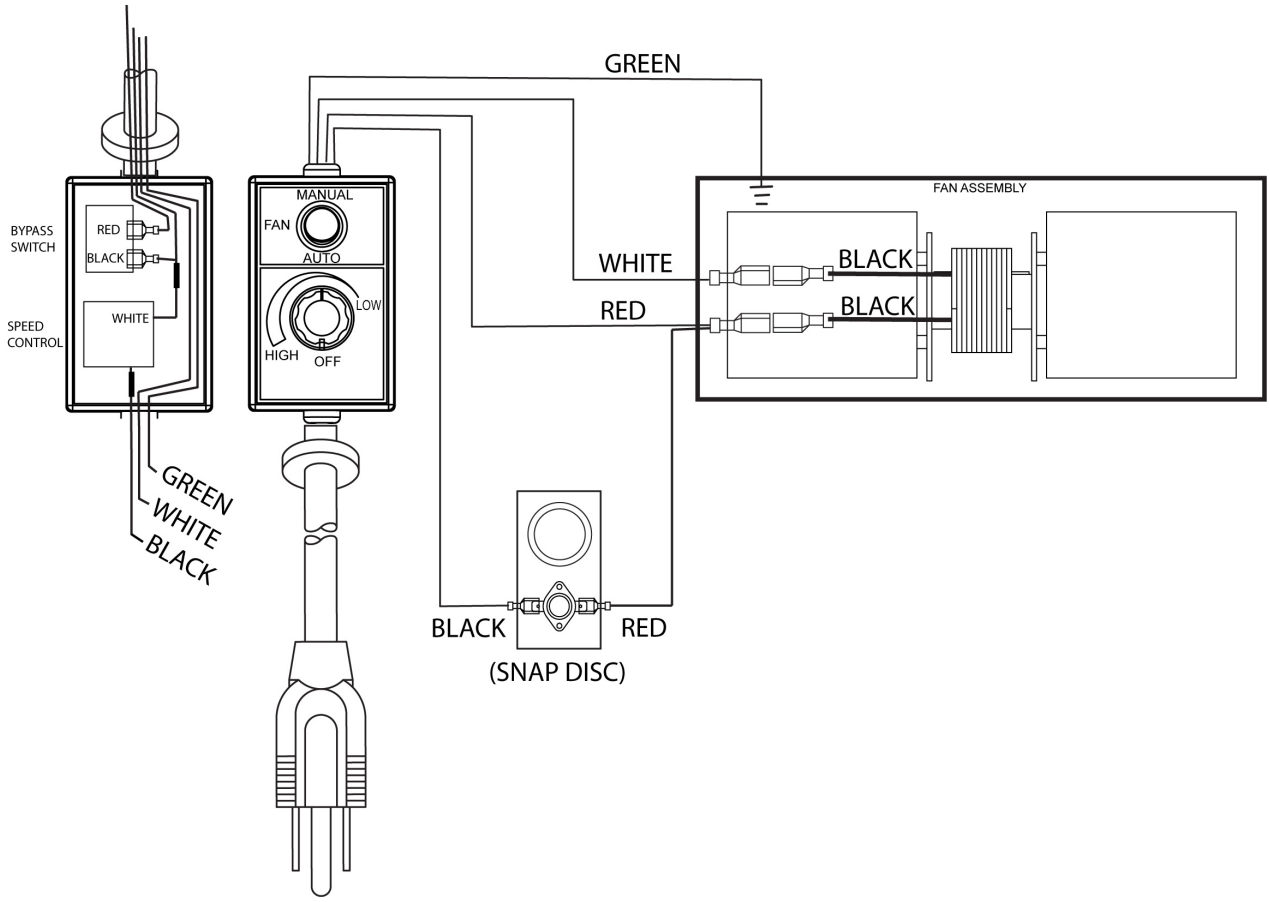
GENERAL SPECIFICATIONS

	WS18	WS22
WATTS: CONVECTION BLOWER	60	60
AMPS: CONVECTION BLOWER	.52	1.3
GRAMS PER HOUR	2.6	2.7
GLASS TYPE	CERAMIC	CERAMIC
BRICK TYPE	PUMICE	PUMICE
BURN TIME ON LOW	8 HOURS	12 HOURS
MAX LOG LENGTH	18	22
BLOWER CFM: CONVECTION	150	150
BTU:	41,800	55,600
MINIMUM DRAFT NEEDED: LOW SETTING HIGH SETTING	-.04 inches WC -.10 inches WC	-.04 inches WC -.10 inches WC
WOOD MOISTURE CONTENT	16% TO 20%	16% TO 20%

NOTE: Specifications are approximate.

NOTE: Hearth & Home Technologies, manufacturer of this appliance, reserves the right to alter its products, their specifications and/or price without notice.

BLOWER TROUBLE-SHOOTING



1) Check for power from the power cord.

2) If power is present, check the bypass switch.

3) If the switch is working, check the snap disc.

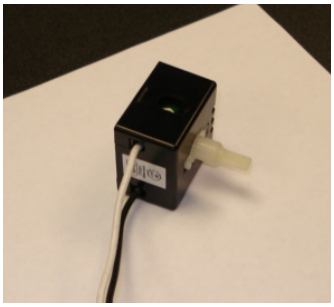
4) Check for power at the blower.

⚠ CAUTION

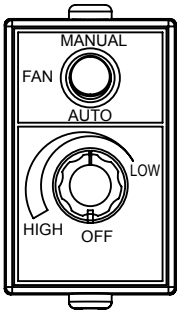
Shock hazard.

- Do NOT remove grounding prong from plug.
- Plug directly into properly grounded 3 prong receptacle.
- Unplug cord before doing any checks or repairs.
- Do NOT touch wires while unit is plugged in.

HOW TO REPLACE THE RHEOSTAT

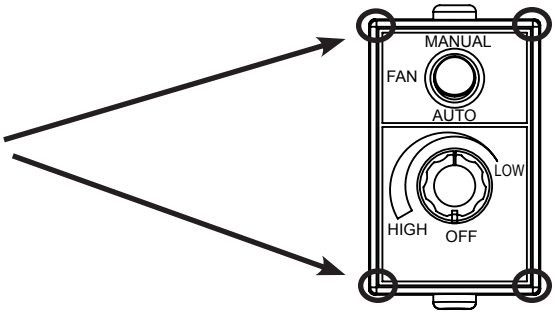


RHEOSTAT PART# 842-0370

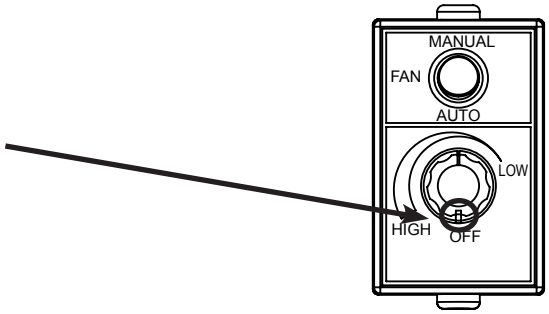


BLOWER POWER CORD PART# SRV7000-194

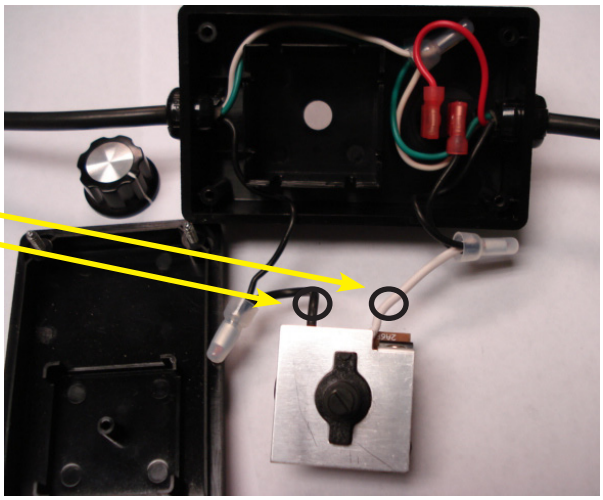
STEP 1) UNPLUG THE POWER CORD. REMOVE THE 4 SCREWS ON THE BACK OF THE BOX.



STEP 2) REMOVE THE KNOB FROM THE RHEOSTAT. A SMALL SET SCREW IN THE KNOB HOLDS IT IN PLACE.

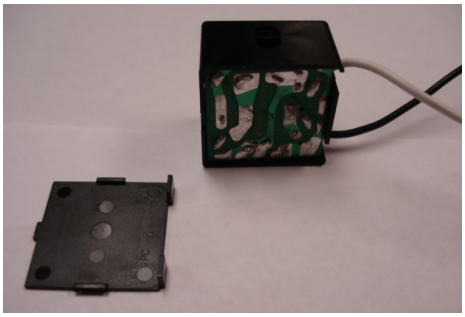


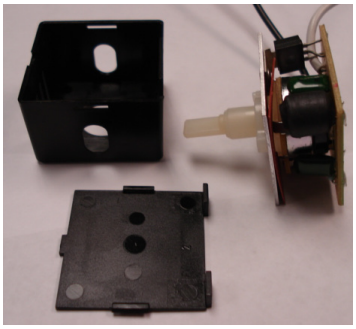
STEP 3) REMOVE RHEOSTAT AND CUT THE WHITE AND BLACK WIRE.



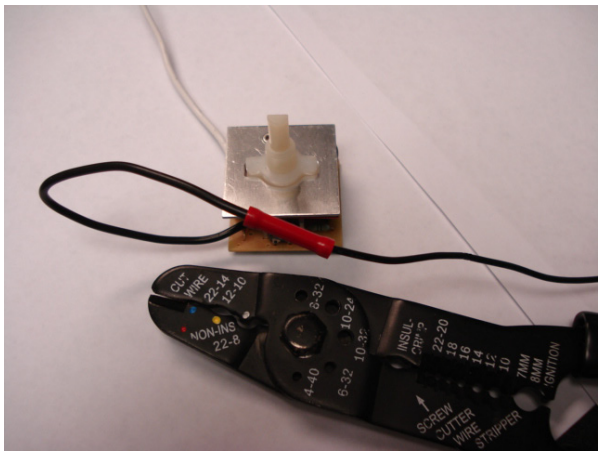
HOW TO REPLACE THE RHEOSTAT

STEP 4) REMOVE THE PLASTIC COVER FROM THE REPLACEMENT RHEOSTAT.





STEP 5) INSTALL NEW CONNECTORS TO THE WHITE AND BLACK WIRES AND REINSTALL THE RHEOSTAT BACK INTO THE BOX.



STEP 6) REINSTALL THE RHEOSTAT CONTROL KNOB AND INSTALL THE BACK COVER PLATE.